



TRANSFER DEGREE PATHWAY GUIDE

Associate in Science to UofL for Bachelor of Science in Industrial Engineering

Overview

Completion of the following curriculum will satisfy the requirements for the Associate in Science at the Kentucky Community and Technical College System and leads to the Bachelor of Science in Engineering at the University of Louisville.

Admission Requirements

Transfer students must have a minimum of 24 transferable credit hours and a minimum GPA of 2.8. Students must have a minimum grade of B- in the following courses: Calculus I (MAT 175) and College Chemistry I (CHE 170). All other grades must be have a C- minimum in order to count towards the degree requirements.

Degree Requirements

The baccalaureate degree in science is the undergraduate degree offered by the university. It is awarded to students who have completed both university-wide requirements and the requirements of the selected degree program. The following university-wide requirements apply to all baccalaureate degrees. The student must complete all Cardinal Core requirements, complete all required courses and program requirements listed in this form, have a cumulative GPA of at least a 2.25, or higher, complete 120 hours applicable to this program, and complete at least 60 hours at an accredited 4-year institution. Please visit <https://catalog.louisville.edu/undergraduate/majors/bioengineering-bs/> for a list of all degree requirements.

General Transfer Requirements

Please reference the following links for information regarding admissions, scholarships, and speaking with an admission counselor.

- Application Process: <http://louisville.edu/admissions/apply/transfer/admissions>
- Scholarship: <http://louisville.edu/admissions/apply/transfer/cost-of-attendance/kctcs>
- Admissions Counselor: <uofl.me/trf-appointment>

All transfers students are required to meet with an academic advisor prior to registering for classes. During your advising appointment, your academic advisor will assess your transfer credit and provide a timeline to degree.

The J.B. School of Engineering has the following deadlines for their application:

Fall – March 1st
Spring – October 1st
Summer – March 1st

Associate of Science to Bachelor of Science in Industrial Engineering
Kentucky Community and Technical College System

Category 1: KCTCS General Education Core Requirements (33 hours)

KCTCS Course	Course or Category	Credits	UofL Course	Completed
ENG 101	Writing I	3	ENGL 101	
ENG 102	Writing II	3	ENGL 102	
COM 181	Oral Communications	3	COMM 111	
TBS XXX	Social & Behavioral Science Gen Ed*	3	SBS XXX	
TBS XXX	Social & Behavioral Science Gen Ed*	3	SBS XXX	
HIS XXX	Heritage*- recommend HIS 101, 102, 108 or 109	3	HIST XXX	
TBS XXX	Arts & Humanities Gen Ed*	3	A/H XXX	
PHY 231/241	General University Physics I & lab	5	PHYS 298/295	
CHE 170/175	General College Chemistry I & lab	5	CHEM 201/207	
MAT 175	Calculus I **	5	ENGR 101	
MAT 185	Calculus II	5	ENGR 102	
	Subtotal General Education Core Courses	41		

TBS XXX means to be selected by KCTCS student.

*One of these courses must be selected from the KCTCS identified Cultural Studies course list, indicate by placing (CS) next to the course name in Category 1 or 2 table.

** Students who do not test into MAT 175 must complete MAT 150 **AND** MAT 155 before being able to take MAT 175. Students may also complete MAT 171 according to placement.

Category 2: KCTCS Associate in Science Requirements (6 hours)

KCTCS Course	Course or Category	Credits	UofL Course	Completed
CHE 180	General Chemistry II	4	CHEM 202	
MAT 275	Calculus III	4	ENGR 201	
	Subtotal AA/AS Requirement Courses	8		

Category 3: KCTCS Electives (21 hours)

KCTCS Course	Course or Category	Credits	UofL Course	Completed
CIT 105	Digital Literacy or IC3 test out	0-3	Elective XXX	
FYE 105	First-Year Experience	3	GEN 100	
MAT 285	Differential Equations	3	ENGR 205	
TBS XXX	Any College Level Course	2-5	TBD XXX	
TBS XXX	Any College Level Course	1-3	TBD XXX	
	Subtotal Elective Courses	11-13		
	TOTAL Associate Degree Hours	60-63		

University of Louisville

Major Requirements for Bachelor of Science in Industrial Engineering:

UofL Course	Course	Credits	KCTCS Course	Taken at KCTCS
CECS 130	Intro to Programming Language	3		
CEE 205	Mechanics I: Statics	3		
CHE 253	Materials Science	3		
CHEM 202	General Chemistry II	3		
ECE 252	Introduction to Electrical Engineering	3		
ENGR 110	Engineering Methods, Tools, & Practice I	2		
ENGR 111	Engineering Methods, Tools, & Practice II	2		
ENGR 151	Engineering Graphics Technology	1		
ENGR 330	Linear Algebra for Engineering	3		
IE 240	Fundamentals of Industrial Engineering	3		
IE 250	Data Mgmt. & Spreadsheet Modeling for Industrial Engineering	3		
IE 288	Industrial Engineering Co-op Ed. Seminar	0		
IE 289	Industrial Engineering Co-op I	1		
IE 320	Manufacturing Processes	4		
IE 360	Probability & Statistics for Engineers	3		
IE 370	Engineering Economic Analysis	3		
IE 380	Work Design	3		
IE 389	Industrial Engineering Co-op II	1		
IE 421	Facility Location & Layout	3		
IE 425	Production & Inventory Control	3		
IE 430	Quality Control	3		
IE 489	Industrial Engineering Co-op III	1		
IT 499	IE Capstone Design	3		
IE 515	Operations Research Methods	3		
IE 516	Stochastic Operations Research	3		
IE 541	Simulation	3		
IE 563	Experimental Design in Engineering	3		
IE 580	Intro to human Factors Engineering & Ergonomics	3		
ME 251	Thermodynamics I	3		
TBD XXX*	Industrial Engineering Elective	6		
Subtotal UofL Credit Hours		81		
Total Baccalaureate Degree Credit Hours		124		

*TBD XXX to be determined with the conjuncture of the Academic Advising

Updated: 2/20/2020